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DRAVIDIC STUDIES

No. I.

THE DEMONSTRATIVE BASES

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No. I.

THE DEMONSTRATIVE BASES.

RADICAL *V* IN DEMONSTRATIVES.

EVIDENCE FROM WORD-SANDHI IN TAMIL.

Sandhi.

By Sandhi we mean the changes which the initial and final sounds undergo when used in a word-group or sentence. Sandhi is of two kinds: (i) External and (ii) Internal.

2. Of these, External Sandhi relates to the changes which are the result of the combination of the final sound of one word with the initial sound of another; while Internal Sandhi refers to the changes which occur within a word itself.

3. In Mixed Sandhi in Tamil where one vowel sound comes in contact with another vowel sound or a consonant, certain important changes are observed which are very interesting.

4. These changes fall mainly under one of three heads, namely—

(i) a new sound may come in (தோன்றல்);
(ii) one sound may pass into another (திரிதல்); and
(iii) there may be loss of some sound (கெடுதல்).

The Change after Demonstratives.

5. Of these changes, the topic taken up here is the appearing of a consonantal sound in Mixed Sandhi between the vowels *a*, *i*, *u*, *e* and either a consonantal sound or the semi-vowel *y*. The changes that are observed in the above cases are as follow *:—

(i) When the next word begins with a vowel or *y*, a new consonantal sound *v* always comes in.

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* எகர வினாமுச் சுட்டின் முன்னர், உயிரும் யகரமு மெய்தின் வவ்வும், பிறவரி னவையுந் தூக்கிற் சுட்டு, நீளின் யகரமுந் தோன்றுத னெறியே, Nannūl, rule 163.

(ii) But when the next word begins with a consonant, the initial consonant of the coming word is always doubled, e.g.—

e + *kaṭal* = *e (k) kaṭal*
a + *kaṭal* = *a (k) kaṭal*
i + *kaṭal* = *i (k) kaṭal*
u + *kaṭal* = *u (k) kaṭal.*

[*e* is the interrogative base and *a*, *i* and *u* are demonstrative bases mentioned in the rule quoted below.]

6. Similarly when a nasal consonant comes in after the interrogative and demonstrative bases mentioned above, it is also likewise doubled, e.g.—

a + *malai* = *a (m) malai*
i + *malai* = *i (m) malai*
u + *malai* = *u (m) malai*
e + *malai* = *e (m) malai.*

7. The same doubling is noticed when the next word begins with a vowel. And in such cases, the consonant *v* which appears [section 5 (i)] is doubled, e.g.—

a + *aṇi* = *a vv aṇi*
i + *aṇi* = *i vv aṇi*
u + *aṇi* = *u vv aṇi*
e + *aṇi* = *e vv aṇi.*

8. As has been said (section 5), when the next word after *a*, *i*, *u* and *e* begins with the semi-vowel *y*, the consonant *v* is said to come in to fill up the hiatus between the vowels and the semi-vowel sound *y*, e.g.—

a + *yāṉai* = *a (v) yāṉai*
i + *yāṉai* = *i (v) yāṉai*
u + *yāṉai* = *u (v) yāṉai*
e + *yāṉai* = *e (v) yāṉai.*

*Dr. Caldwell's Theory.**

9. The regularity with which these demonstratives—proximate *i*-, remote *a*-, intermediate *u*-,—and the interrogative base *e*- act in the examples quoted above, is very remarkable. On this point, Dr. Caldwell observes: "The vocalic prefixes *a*, *i*, *u* and *e* occupy one and the same position, obey one and the same law, and differ only in the particular signification which is expressed by each." It is an interesting question why these bases should behave so very regularly. Dr. Caldwell points out rightly: "It is very difficult to treat the

* Comparative Grammar, 1913, 3rd edition, page 421.

demonstrative and interrogative pronouns of the Dravidian family separately. The bases are different but they are built up on those bases in precisely the same manner and obey one and the same law, so that what is said about the one class may be regarded as said about the other also" (Comparative Grammar, 1913, 3rd edition, page 420).

10. Elsewhere in discussing the demonstrative pronouns *ivaṉ*, 'this man,' *avaṉ*, 'that man,' *uvaṉ*, 'the intermediate or medial man,' and the interrogative *evaṉ*, 'which man,' he states that the words which signify man and woman have gradually lost the definiteness of their original signification and have shrunk into the position of masculine and feminine terminations and observes further: "The suffixes or signs of gender are so closely incorporated with the demonstrative bases that *it requires some knowledge of the principles of the language* to enable us to separate them."

11. But when he attempts to settle definitely the primitive form of the demonstrative bases, he states: "The ordinary demonstratives of the Dravidian dialects are the simple short vowels *a*, *i* and *u*; and it will be found that every other form which they assume is derived from this by some euphonic process."

The Theory of Euphonic Process.

12. Assuming for argument that this is so, the suggestion of 'euphonic process' does not help us to solve the difficulty which at once presents itself, when the masculine and feminine terminations are added to the simple short vowels.

13. The rules of vowel-sandhi in Tamil and other Dravidian languages throw much light on the question. In the Dravidian languages two vowels do not generally coalesce together, but the hiatus between them is prevented by a euphonic consonant, either *v* or *y*.

14. There are, however, some examples in Telugu where sandhi does take place and a vowel is elided, e.g.—

In Telugu, *Lakṣmi* + *amma* gives *Lakṣm-amma*.
But in Tamil we should have *Lakṣmi (y) amma*.

That is to say, we should get a *y*-glide after the front vowel *i*. And not only in the case of *i* but in the case of other front vowels, *i* and *ai*, a *y*-glide comes in quite naturally in vowel-sandhi in Tamil, e.g.—

tī + *eṭuttāṉ* = *tī-y-eṭuttāṉ*
peruntakai + *iruntāṉ* = *peruntakai (y) iruntāṉ*.

15. In Telugu also, as in Tamil, a *y*-glide comes in after long *i* in vowel-sandhi, e.g.—

pallaki + *ekkenu* = *pallaki (y) ekkenu*.

And when we examine old Telugu we find that there is perfect agreement between Tamil and Telugu in the matter of the *y*-glide coming in after the front vowels in vowel-sandhi. The following example from the Telugu Bhāratam fully bears out the point, e.g. :—

pani + ēmi + ani gives *pani-y-ēmi-y-ani* (Bhāratam III-3, verse 267); but in modern Telugu we should have only *panēmani*.

This shows that in vowel-sandhi in Dravidian languages, whenever there is a front vowel like *i* as the final sound of one word, we should always expect to find the euphonic *y* coming in before a vowel.

Dr. Caldwell's Theory examined.

16. If, as Dr. Caldwell says, the proximate demonstrative be only the pure vowel *i*, then the addition of the terminations denoting gender as *-an̲*, *-al* and *-ar* would produce only *iyan̲*, *iyaḷ* and *iyar* and not, as is actually the case, *ivan̲*, *ivaḷ* and *ivar*.

For, the euphonic consonant *v* comes in only between the back vowels of one word and other vowels in the next, as in—

viḷa + al̲akŭ = viḷa (v) al̲aku
kaṭu + al̲akŭ = kaṭu (v) al̲aku

17. Now in the case of the demonstrative pronoun *ivan̲*, we get a *v* and not a *y* between *i* and *-an̲*. This fact and the doubling of the initial consonants after *a-*, *i-*, *u-* and *e-*; and the appearance of a *v* before the initial *y* of the next word, which have been illustrated above (sections 5, 6, 8) have to be satisfactorily explained. Dr. Caldwell was evidently much struck with this unity of principle in these bases. For he says : * "In no other language or family of languages in the world shall we find its equal or even its second," and concludes: "The Dravidian family has retained some præ-Sanskrit elements of immense antiquity," and "in particular its demonstratives were not borrowed from Sanskrit."

18. But the main question is why these demonstrative and interrogative bases should behave in the same manner. This would be explained if Tamil grammar is read historically and the facts relating to this subject are well investigated. As Dr. Caldwell observes : "In this particular, all the dialects agree on the whole so perfectly with Tamil and with one another that it is unnecessary to multiply examples." And as Tamil forms agree with the forms in other languages of the family, Tamil may throw much light on the question.

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* Comparative Grammar, 1913, 3rd edition, page 422.

Illustrations from the Old Classics.

19. The Tamil literary dialect of the ancient classics furnishes many illustrations which go to show that the demonstrative and interrogative bases are not merely the simple vowels *a*, *i*, *u* and *e*, as Dr. Caldwell says, but that they are *av*, *iv*, *uv* and *ev*.

A. These forms are fairly common in the classics. The demonstrative base *uv* (உவ்) is used to denote the intermediate object or more particularly the object behind or beyond, e.g.—

(i) உவக்காண் எங்காதலர் செல்வர் இவக்காண்
என்மேனிபசப்பூர்வது (Kuṟaḷ 1185).

(ii) வருந்துநோய்தணியவிருந்தனர் உப்பால் (Cilappatikāram XII, line 5, p. 286).

(iii) ஊழையும் உப்பக்கம் காண்பர் உலைவின்றித் தாழாது
ஞற்றுபவர் (Kuṟaḷ 620).

(iv) உப்பால் உயர்ந்த வுலகம்புகும் (Nāṉmaṇikkaṭikai, v. 29).

(v) உப்பாலிடங்கொள் பேரண்டம் (Old Tiruviḷaiyāṭal, ch. 36, v. 26).

(vi) உவனாய் நின்றான் (Periyāḻvār Tirumoḻi I-3, v. 5).

(vii) மொய்யானதில்லா முடவனொருவன்றனது
கையான வையிரண்டுங்கந்தாத்தவழ்தருவால்
ஐயாவதற்குமோரரும்பிணியொன்றெய்தியக்கால்
உய்யானே யானும் உவன்போற்றளர்வேனோ
(Kantapurāṇam, Mārkaṇṭēya, v. 18).

(viii) அவ் வெள்ளருவி உவ்வரையதுவே (Patiṟṟuppattu, v. 78).

B. The proximate demonstrative (இவ்) *iv* is likewise much used--

(i) இவ்வே பீலியணிந்து மாலைசூட்டி (Puṟanāṉūṟu, v. 95).

(ii) இவ்வென வுரைத்துமென்று (Cintāmaṇi, v. 2762).

(iii) இவ்விருந்தான் (Cintāmaṇi, v. 1790).

C. The form *av* (அவ்) for the remote demonstrative is also freely used—

அவ்வே, இவ்வென வறிதற்கு மெய்பெறக் கிளப்ப (Rule 121, Collatikāram, Tolkāppiyam).

The Tolkāppiyam.

20. In the old grammar in Tamil, known as the *Tolkāppiyam*, the grammarian discusses which sounds occur as final sounds in Tamil. With regard to the final consonant *v* he has a rule—

"வகரக் கிளவி நான்மொழி யீற்றது" (Rule 81, Eḻuttatikāram).

The rule says that there are only four words in Tamil where the consonant *v* is final. These, the commentator tells us, are *av*, *iv*, *uv* and *tev*. And it is this permitted final *v* which makes its appearance in vowel-sandhi (sections 7, 8).

Av, iv *in Tamil Prose.*

21. That the expressions *av* and *iv* were so used extensively is further clearly seen from the old prose writings also. In his prose commentary on the *Tolkāppiyam* the commentator *Naccinārkiṉiyar* writes *av* and *iv* to denote 'that' and 'this' respectively, e.g.—

(i) அவ் இன்சாரியை ஈறு திரியுமாறு கூறுகின்றது
(Rule 121, Eḷuttatikāram, Tolkāppiyam, p. 86).

(ii) அவ் உண்டென்னுஞ் சொல் பண்பை யுணர்த்துங்கால்
(Rule 222, Collatikāram, Tolkāppiyam, p. 143).

(iii) இவ் ஈற்று நாட் பெயர்
(Rule 331, Eḷuttatikāram, Tolkāppiyam, p. 204).

An additional confirmatory evidence of the wide use of forms like (இவ்) *iv* in ancient Tamil prose is furnished by the form found in an ancient Tamil Inscription (A.D. 1000), e.g.—

இவ் ஊரும் பணையமாய் *

The v *is not a glide.*

22. In the Naṉṉūl which was written some centuries after the date of the Tolkāppiyam, the grammarian says that a *v* comes in between *a-*, *i-*, *u-*, and *e-* and the initial vowel of the next word (page 1, footnote). The commentator of this rule observes that this *v* which makes its appearance in vowel-sandhi is not a glide.† This observation of the ancient commentator clears the doubt which may arise whether the *v* between *a-* and *-an* in the word *avaṉ* is radical or only a glide-sound coming in to prevent the hiatus between the vowels.

Other evidence.

23. The changes which take place in sandhi when a word beginning in *y* or *v* comes after the demonstratives *a-*, *i-*, *u-*, are given by Tolkāppiyar in rule 206, Eḷuttatikāram of the Tolkāppiyam. The rule says: "யவமுன் வரினே வகரமொற்றும்,"

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* Travancore Archæological Series, Volume II, Part I, page 39, line 17.

† யகரமுமெய்தில் வவ்வும் என்றமையின் இங்ஙனந் தோன்றிய வகர யகரங்கள் உடம்படு மெய்யல்ல வென்பதூஉம் பெற்றும் (Commentary on rule 163 of the Naṉṉūl).

i.e., if a word beginning in *y* or *v* comes after *a-*, *i-*, *u-*, the consonant *v* appears between them.

For example, *a* + *yāḷi* = *avyāḷi*.

a + *va ḷai* = *avvaḷai*.

This is very important as it implies the existence of a consonant *v* after *a*, etc. Its appearance in this case is in the nature of a survival of an original consonant.

In the next rule (rule 207 of Eḻuttatikāram, Tolkāppiyam), Tolkāppiyar dwells upon the changes which occur in sandhi when instead of *y* or *v*, a vowel begins the word which comes after *a-*, *i-*, *u-*. And this rule 'உயிர்முன்வரினு மாயியற்றிரியாது' is particularly interesting. The commentator says that the *v* which appears in sandhi after *a-*, *i-*, *u-* (according to the previous rule) would, in this case, be always doubled. And the only exception, where the *v* is lost, is where the demonstrative base is lengthened. (Commentary on rule 207 quoted above.)

The *v* after *a*, *i*, *u* is known as 'the demonstrative *v*' ('சுட்டு முதல்வகரம்': rule 183, Eḻuttatikāram, Tolkāppiyam; and 'சுட்டு வகரம்': rule 235, Naṉṉūl); and as 'the demonstratives which have the *v* as the final sound' ('வவ்விறு சுட்டு': rule 250, Naṉṉūl) as distinguished from the final sound *v* in the word *tev* (cf. 'ஏனைவகரம்,' i.e., 'the other *v*' as distinguished from the 'demonstrative *v*' in the rule 'ஏனை வகரம் இன்னொடுசிவணும்') (Rule 184, Eḻuttatikāram, Tolkāppiyam).

24. In the Tolkāppiyam, the changes which take place in sandhi after the demonstratives are treated separately and a special rule (rule 184 of Eḻuttatikāram) has reference solely to the other word *tev*. Similarly the author of the Naṉṉūl has a separate rule relating to the sandhi of the word *tev* with other words. The rule is—

'தெவ்வென் மொழியே தொழிற் பெயரற்றே
மவ்வரின் வஃகான் மவ்வுமாகும்' (Rule 236, Naṉṉūl).

The rule quoted above states that when the word *tev* is combined with other words, a full *u* should appear after the final *v*. Thus—

tev+*katitu* would give *tev* + *u* + *kaṭitu*.

Then the *v* is doubled before *u* and we get *tev*+*v*+*u*+*k*-*kaṭitu* (தெவ்வுக்கடிது).

25. But if instead of a vowel or a stop consonant, the nasal consonant *m* begins the next word after *tev*, the final *v* in *tev*

would become assimilated to the initial *m* in the coming word as in—

tev+matańkiya which gives *tem-matańkiya.**

These facts show that the vowel *u* which comes after *tev* is in the nature of a union-vowel or insertion between root and another word. The round vowel *u* comes in on account of the *v* in *tev*. And as Tolkāppiyar includes this word in the category of words with permissible final *v* in Tamil, † the actual presence of *v* in the demonstratives is clearly proved.

Av, iv *in Tamil Poetry.*

26. Another important fact which is sometimes noticed is the change of the demonstrative *av* into *ā* (ஆ) in Tamil poetry. There are some very striking examples in the ancient classics where the commentator invites our special attention to such a change. In the line 'ஆயிடைமணந்தபந்தர்' (Patiṟṟuppattu, verse 51) the commentator states that the demonstrative base *av* was changed into long *ā*.‡ Here, the radical *v* is lost as the demonstrative base is lengthened (vide section 23).

The substitution of *ā* for *av* is possible in poetry because both have the same quantity. There are numerous examples in later literature as well.§ And the grammarian Tolkāppiyar also uses the form *ā* for *av* in some of the rules in the Tolkāppiyam.||

27. In this connexion it is interesting to note that in Kurukh there is a remote demonstrative *ā* and a proximate demonstrative *i*, e.g. ¶—

ā ālasin = that man.
ī mukkan = this woman.

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* தெம்மடங்கிய சேணிலங்கேசயர்
தம்மடங்கலை யுடன் நம்பியதாமென
மும்மடங்கு பொலிக்க முகத்தினன்
வெம்மடங்கலை யுன்னி வெதும்புவான் (Kampa-Rāmāyaṇam, Suntarakāntam Kāṭcip-paṭalam, verse 19).

† Rule 81, Eluttatikāram, Tolkāppiyam, section 20.

‡ அவ்வென்னும் சுட்டுமுதல்வகார வீற்றுப்பெயர் ஆயிடையென முடிந்தது (Patiṟṟuppattu, page 82, line 7).

§ (1) ஆயிடைக் கவிகளோடு மங்கதன் முதலினோர்
(சுந்தர—திருவடி தொழுத–84)
(2) ஆயிடை புரையிழந்தழகன் றேவியும்
(சுந்தர—காட்சி–61)

From the Tolkāppiyam.

|| (i) ஆயேம் சொல்லும் அசைநிலைக்கிளவி
(அவ் + எம் = ஆயேம்)
(Rule 281, Collatikāram, Tolkāppiyam).
(ii) கெடவரல் பண்ணை யாயிரண்டும் விளையாட்டு (அவ்இரண்டும்).
(Rule 319, Collatikāram, Tolkāppiyam).

¶ Kurukh Grammar by Rev. Ferd. Hahn (1900), page 20, section 23.

And in Tulu the word *avu* is a demonstrative pronoun meaning 'it' or 'that'; and *avvē* is emphatic (= 'just that').

Conclusion.

28. Thus the loss of *v* in the initial lengthening of the demonstrative base in poetry; the use of the forms in literature and in the rules and in the commentaries on grammar; and the survival of *v* in mixed sandhi strongly indicate that the old demonstrative bases were *av*, *iv* and *uv*.

And the reason why these bases behave in the same manner is then easily intelligible.

Another important point is the doubling of the consonants after *a*, *i*, *u*, which is due to the presence of *v* in the bases *av*, *iv*, *uv*, where the *v* has been lost for a long time.

And similarly the doubling of *v* after *a*, *i*, *u* and before other vowels is also quite regular since the original bases are *av*, *iv* and *uv*. For, in pronouncing *av* the stress is thrown upon *v* and in passing from the strongly pronounced *v* to the vowel of the next word the consonantal glide *v* is inevitable. Hence we get the doubling of *v* in these cases as in the compound word *a(v)+aruvi* which gives *av-v-aruvi*.

Finally, the appearance of the consonant *v* before words beginning in *y* is but the survival of the lost consonant in these demonstrative bases.

29. Dr. Caldwell characterizes this regularity of principle as 'the beautiful and philosophical regularity of this quadruple set of remote, proximate and intermediate demonstratives and interrogatives' (page 422). But when once it is realized that the old forms were *av*, *iv*, *uv* and *ev*, as Tamil grammar treated historically and illustrated by examples from Tamil classics proves so clearly, the solution is easy. Dr. Caldwell was labouring under a misapprehension that the bases were pure vowels. It was because he started with this idea that the ordinary demonstratives of the Dravidian dialects are the simple short vowels *a*, *i*, *u*, that he was not able to satisfactorily explain the changes above referred to. And that he himself was not absolutely certain about this suggestion is clear from an observation which he has made elsewhere: "It requires some knowledge of the principles of the language to enable us to separate them."

30. The principles of the language could be well estimated only by a study of the forms of words in the literary dialect of the more ancient classics—which were probably not consulted by Dr. Caldwell—and by the comparative and historical study of Tamil grammar. When this is done we find that *avaṉ*, *ivaṉ*, and *uvaṉ* are perfectly regular forms as they arise from *av*, *iv* and *uv* and not from *a*, *i* and *u*.

C. P. VENKATARAMA AYYAR.

Tamil Books referred to.

(1) Kuṟal.
(2) Cilappatikāram.
(3) Nāṉmaṇikkaṭikai.
(4) Patiṟṟuppattu.
(5) Puṟanāṉūṟu.
(6) Cintāmaṇi.
(7) Kampa-Rāmāyaṇam.
(8) Kantapurāṇam.
(9) Paḷaiya (old) Tiruviḷaiyāṭal.
(10) Periyāḻvār Tirumoḻi.
(11) Tolkāppiyam : Eḻuttatikāram and Collatikāram.
(12) Naṉṉūl and Commentary.

REMARKS.

Mr. Venkatarama Ayyar in his article on the Demonstrative and Interrogative bases in Dravidian has followed up a suggestion of mine, testing it by means of the early literature and the older grammarians, and arriving at the conclusion that the suggestion is borne out by the facts which these present. He has confined himself mainly to the data derivable from Tamil and, to a less extent, Telugu, but I think what he has said is sufficient not only to warrant the conclusion that these bases in Tamil are to be regarded as *av-*, *iv-*, *ev-*, rather than *a-*, *i-*, *e-*, but that *av-*, *iv-*, *ev-* are the pan-Dravidic forms.

No phonetician could readily rest content with the explanation usually given of such forms as Tamil *ivaṉ*, 'this man,' *avyāṉai*, 'that elephant,' namely that they are made up respectively of the demonstrative particle *i-* plus the termination *-aṉ*, and the demonstrative particle *a-* plus the noun *yāṉai*. To call the *v* of *ivaṉ* and *avyāṉai* a glide, as is sometimes done, is to pay too little regard to the nature of a glide as a transition-sound the character of which is strictly conditioned by the sounds from which and to which the transit is made. In the case of vowel-glides, with which we are here chiefly concerned, the main determining factor is the vowel that precedes. If this is palatal *(i, e)*, the glide is palatal, viz., *i̯*, or unsyllabic *i*; if it is labial *(o, u)*, the glide is labial, viz., *u̯*, or unsyllabic *u*. These transition-sounds are often not graphically expressed, but they exist nevertheless, and cannot but exist, in normal speech. In Latin *eam*, 'her,' was pronounced *ei̯am*; compare Gothic *ija*, which is the equivalent of Latin *eam* : both represent an Indo-germanic *ei̯-ām*. Similarly Latin *duō*, 'two' was pronounced

duu̯ō ; compare the dissyllabic pronunciation of Vedic *dvā* = *du̯ā*. So in English : unless we deliberately pause after the first word, 'who are,' 'we are' must inevitably be pronounced with the glides *u̯* and *i̯* respectively. This phenomenon does not belong to any particular language or group of languages : it is a phonetic law, a natural law which, within its proper sphere, operates with the regularity of any other natural law. This being so, if the particle *i-* is to be compounded with *-aṉ*, we should expect *iyaṉ* as the result ; just as from *paṇi*+*al*, we have *paṇi-y-al*, 'worship,' or from *maṇi*+*aṭikka*, *maṇi-y-aṭikka*, 'to strike a bell,' where *y* correctlv represents the glide : and only if it could be shown that அ has, or even had at one time an *o*-tonality could the *v* of *avyāṉai* receive any justification as a glide. But, even if that were possible, what are we to say to *ivyāṉai*, 'this elephant,' where the *v* stands between two palatal sounds ? The glide-theory fails as a principle of interpretation for these forms. Only in the case of the demonstrative particle seen in *uvaṉ*, 'that (intermediate) man,' could the *v* be reasonably explained on this principle, namely, as an off-glide.

The problem of vowel-glides in Dravidian—a very important problem—is made more complex by a peculiarity in the pronunciation of vowels, not unnaturally more apparent to a stranger than to the speakers themselves. One finds what may be regarded, in a way, as the opposite of the phenomena of vowel-glides. As after a palatal vowel the glide *i̯* is heard and after a labial vowel the glide *u̯*, similarly before a palatal vowel, at least at the beginning of a word, the sound *i̯* is heard and before a labial vowel the sound *u̯*. Just as the ordinary vowel-glides are frequently unexpressed (in Greek and Latin, for example) so *these* sounds receive as a rule no expression in the written language. The former are called 'off-glides.' It will cause no confusion, I think, if for our present purpose we call the latter 'on-glides,' always remembering that the phonetician (usually) employs this word in a somewhat different sense. In such cases as Tamil *vaṇḍi-y-illai*, 'there is no carriage,' Telugu *pō-v-unu*, 'he would go,' etc., *y* and *v* might conceivably be regarded as either off-glides or on-glides, since they stand between two palatal and two labial sounds respectively. The on-glide is clearly present in Telugu *ā-yenu*, 'he became,' *a-vunu*, 'he would become,' etc., the off-glide as clearly in Tamil *muniy-ōṭu*, 'with the sage,' *aduv-ē* 'that indeed.' On the whole the on-glides seem to prevail in internal sandhi (therefore Telugu *pō-vunu* probably, as *pō-yenu*, 'he went'); the off-glides in external sandhi (therefore probably Tamil *vaṇḍiy-illai*, as *vaṇḍiy-alla*,

'it is not a carriage'). No doubt there are many apparent exceptions; but this only makes the problem all the more interesting.

That these pronominal bases are *av-*, *iv-*, *ev-* receives corroboration from the doubling of an initial consonant when these bases are prefixed, a fact which Mr. Venkatarama Ayyar—who is mainly concerned with ancient testimony—has not dwelt upon. Such forms as *akkaṭal*, 'that sea,' etc., can be readily interpreted as arising from *av+kaṭal*, etc. A parallel instance, or at least a striking illustration of a double consonant arising in this way, is afforded by Hebrew. In Hebrew, when the article *ha-* is attached to a noun beginning with a consonant, this consonant must be doubled whenever such doubling is phonetically admissible. The reason for this doubling is made clear by a reference to the cognate languages. In Arabic, for instance, the article is *al*. The final *l*, there can be little doubt, was originally present in the Hebrew article; and it is to this original presence that the doubling of a following consonant is due. As in Hebrew the original *l* of the article in combination, let us say, with an initial *k* of the following noun produced by assimilation *kk* (the consonant proper to the noun being thus preserved), so, for example, in Tamil the original *v* of these bases, in combination with an initial *k* of the noun to which they were prefixed, produced by assimilation *kk*. The doubling of a following consonant became then the traditional characteristic of the article in Hebrew and of these pronominal prefixes (regarded now as *a-*, *i-*, *e-*) in Tamil, and its necessity was in both cases embodied in a grammatical rule.

I may add that I do not at all think that this is the only instance of such assimilation in Tamil. Indeed, I feel that we may find an exact parallel to the above assimilation of *v-k* to *k-k* in the formation of the plural of a certain class of nouns. All nouns that end in the accusative singular in *-vai*, i.e., all nouns which in the corresponding Malayāḷam form have in the nominative singular a final *-vŭ*, form their plural in *-kkaḷ*; for example, *āṉmākkaḷ*) 'souls.' Here, it seems to me, an original *āṉmāv-kaḷ* (cf. the accusative singular *āṉmāv-ai* and Malayāḷam nominative singular *ātmāvu*) is related to *āṉmākkaḷ* exactly as an original *av-kaṭal* is to *akkaṭal*.

What has been said of *v-k* would naturally apply equally to *v-t*, or to *v* in combination with any other consonant.

If this is so, if these pronominal bases are to be regarded as *av-*, *iv-*, *ev-*, we should expect to find these forms when they are prefixed to words beginning with a vowel. This is, of course, not so: the *v* is in this case doubled; *av+iṭam* becomes *avviṭam*, 'that place,' *av+āṭu* becomes *avvāṭu*, 'that sheep,' etc. I

would suggest that this doubling when a vowel follows may be due to the influence of the far greater number of instances in which the doubling is due to a following consonant. There may have been other causes at work. I will only point out that the genius of Tamil is not averse to a single consonant following a short vowel at the beginning of a word, as is evidenced not only by such words as *ilai*, 'leaf,' *talai*, 'head,' *malai*, 'mountain,' and a host of others, but also by such primitive combinations as *nil-am*, 'ground,' *nal-am*, 'goodness,' *eṉ-a* = Sanskrit *iti* (by the side of *eṉṉa*, 'to say'), *paṭa*, 'to suffer'; *cey-al*, 'agency' (by the side of *ceyyal*, 'to do'). And especially I would call attention to the contrast between Tamil *avviṭam*, 'that place,' *ivviṭam*, 'this place,' and the isolated forms *aviḍam*, '(in) that place, there,' *ividam*, '(in) this place, here,' in Malayāḷam, a language which so frequently seems to reflect an earlier stage of Tamil, or at least to throw light upon such an earlier stage. Such facts require explanation and must be taken into account when the phonetic modifications of these pronominal bases are being dealt with.

Mr. Venkatarama Ayyar calls attention to the use of *ā* as a substitute for *av-* in early Tamil poetry. It is also found, together with the corresponding *ī* for *iv-*, *ē* for *ev-*, in Malayāḷam, Telugu and Kanarese. This *ā* would appear to be due, directly or indirectly, to the transference of the length of the double consonant to the preceding vowel. In Telugu there are clear traces of such exchange of quantity where the consonant is *v* or *y*; for example, literary Telugu *ēvāni*, 'whose,' by the side of *evvāni*, *āyadi*, 'she, it,' by the side of *ayyadi* (Arden's Progressive Grammar, pages 323, 324). If we might look upon such instances—and many more could be added—as the survival of a previously predominating characteristic, if we could assume, in accordance with such a principle, that there once existed in Telugu side by side pairs like, for example, *avvrāyi* and *āvrāyi*, 'that line' the existence of the latter form as *ā vrāyi* in present-day Telugu, and the contrast which this form offers to the present-day Tamil *avvarai*, 'that limit' would become more intelligible. There is little trace of such a principle in Tamil as it is written to-day. But since these pronominal affixes are so evidently identical throughout the Dravidian group, and since we find *ā* by the side of *av-* in early Tamil literature, and, moreover, since we find *ā* as the regular form in Malayāḷam, the sister dialect of Tamil, I cannot resist the conclusion that the principle disclosed in such pairs as *ēvāni*, *evvāni* was at an early period of very wide prevalence; and as I have suggested that it may account for the difference in the demonstrative element between Tamil *avvarai* and Telugu *ā vrāyi*, so I would suggest that it is also accountable for the difference between Tamil *avvarai*

and Malayāḷam *ā vara*, 'that line.' Of the two phonetic variants Tamil has fixed upon the one, viz., *av-* (and similarly *iv-*, *ev-*), Malayālam upon the other, viz., *ā* (and similarly *i*, *ē*).

This is by no means the whole story, but I think I have said enough to indicate what I feel to be the lines along which these bases have developed. There is need for much further investigation.

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